

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 5
1. (Currently Amended) A method for protecting a marine propulsion system, comprising the steps of:
- providing a source of electrical power;
- causing a housing structure of said marine propulsion system to act as an anode in a
- 10 galvanic circuit which comprises said housing structure, a metallic component, and water in which said housing structure and said metallic component are at least partially submerged, said housing structure of said marine propulsion system being adapted to be mounted for support on a transom of a marine vessel and including a driveshaft housing extending downwardly to a gear case, a driveshaft in said driveshaft housing being connected in torque transmitting relation with
- 15 a propeller shaft in said gear case for rotating a propeller;
- ohmically connecting said anode to said source of electrical power and directing unidirectional nonalternating current flow through said galvanic circuit.
2. (Original) The method of claim 1, further comprising:
- 20 inducing said metallic component to act as a cathode in said galvanic circuit.
3. (Previously Presented) The method of claim 1, wherein:
- said metallic component is said propeller.
- 25 4. (Previously Presented) The method of claim 1, wherein:
- said causing step comprises the step of providing an electrically conductive coating on a surface of said housing structure which is submerged during operation of said marine propulsion system, and comprising ohmically connecting said electrically conductive coating to said source of electrical power.
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5. (Original) The method of claim 4, wherein:
- said electrically conductive coating is made of a polymer material.

6. (Original) The method of claim 5, wherein:

said polymer material is a matrix in which an electrically conductive material is disposed.

5 7. (Original) The method of claim 6, wherein:

said electrically conductive material comprises graphite fibers.

8. (Original) The method of claim 4, further comprising:

10 disposing an electrically insulative layer between said housing structure and said electrically conductive coating.

9. (Previously Presented) The method of claim 4, further comprising:

15 impressing a current on said electrically conductive coating from said source of electrical power through the ohmic connection of said source of electrical power to said electrically conductive coating.

10. (Previously Presented) The method of claim 9, further comprising:

20 sensing a voltage at a preselected distance from said housing structure to determine the effectiveness of said causing step.

11. (Original) The method of claim 10, further comprising;

intermittently ceasing said causing step as a function of said voltage to regulate said voltage to a predetermined range of magnitudes.

25 12. (Original) The method of claim 10, wherein:

said housing structure is at least partially submerged in saltwater; and
chlorine gas is formed on an exposed surface of said housing structure.

13. (Original) The method of claim 10, wherein:

30 said housing structure is at least partially submerged in non-saltwater; and

the local pH of said non-saltwater is decreased in the region immediately proximate an exposed surface of said housing structure.

14. (Currently Amended) A method for protecting a marine propulsion system, comprising the steps of:

providing a housing structure for said marine propulsion system, said housing structure of said marine propulsion system being adapted to be mounted for support on a transom of a marine vessel and including a driveshaft housing extending downwardly to a gear case, a driveshaft in said driveshaft housing being connected in torque transmitting relation with a propeller shaft in said gear case for rotating a propeller;

disposing an electrically conductive coating on at least a portion of the surface of a said housing structure of said marine propulsion system, said coating acting as an anode in a galvanic circuit which comprises said coating, a metallic component, and water in which said housing and said metallic component are at least partially submerged;

ohmically connecting said electrically conductive coating to a source of electrical power and directing unidirectional nonalternating current flow through said galvanic circuit.

15. (Currently Amended) The method of claim 14, further comprising:

providing an electrically insulated layer between said housing structure and said electrically conductive coating, providing an ohmic circuit between said source of electrical power and said electrically conductive coating, and providing a said galvanic circuit between said electrically conductive coating and a said metallic component of said marine propulsion system.

16. - 17. (Canceled)

18. (Currently Amended) The method of claim ~~16~~ 14, further comprising:

inducing said metallic component to act as a cathode in said galvanic circuit.

19. (Previously Presented) The method of claim 18, wherein:

said metallic component is said propeller.

20. (Original) The method of claim 19, wherein:

said electrically conductive coating is made of a polymer material.

5 21. (Original) The method of claim 20, wherein:

said polymer material is a matrix in which an electrically conductive material is disposed.

22. (Original) The method of claim 21, wherein:

said electrically conductive material comprises graphite fibers.

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23. (Original) The method of claim 21, further comprising:

disposing an electrically insulative layer between said housing structure and said electrically conductive coating.

15 24. (Previously Presented) The method of claim 21, further comprising:

impressing a current on said electrically conductive coating from said source of electrical power through the ohmic connection between said source of electrical power and said electrically conductive coating.

20 25. (Previously Presented) The method of claim 24, further comprising:

sensing a voltage at a preselected distance from said housing structure to determine the effectiveness of said causing step.

26. (Original) The method of claim 25, further comprising:

25 intermittently ceasing said causing step as a function of said voltage to regulate said voltage to a predetermined range of magnitudes.

27. (Original) The method of claim 25, wherein:

30 said housing structure is at least partially submerged in saltwater; and
chlorine gas is formed on an exposed surface of said housing structure.

28. (Original) The method of claim 25, wherein:

said housing structure is at least partially submerged in non-saltwater; and
the local pH of said non-saltwater is decreased in the region immediately proximate an exposed surface of said housing structure.

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29. (Currently Amended) A method for protecting a marine propulsion system, comprising the steps of:

providing a housing structure for said marine propulsion system, said housing structure of said marine propulsion system being adapted to be mounted for support on a transom of a marine vessel and including a driveshaft housing extending downwardly to a gear case, a driveshaft in
10 said driveshaft housing being connected in torque transmitting relation with a propeller shaft in said gear case for rotating a propeller,

disposing an electrically conductive coating on at least a portion of the surface of a ~~said~~ housing structure of said marine propulsion system, said coating acting as an anode in a galvanic circuit which comprises said coating, a metallic component, and water in which said housing structure and said metallic component are at least partially submerged;
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providing a source of electrical power; and

ohmically connecting said source of electrical power to said electrically conductive coating and directing unidirectional nonalternating current flow through said galvanic circuit.
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30. (Canceled)

31. (Currently Amended) The method of claim ~~30~~ 29, further comprising:

inducing said metallic component to act as a cathode in said galvanic circuit.

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32. (Original) The method of claim 31, wherein:

said metallic component is a propeller of said marine propulsion system.

33. (Original) The method of claim 32, wherein:

said electrically conductive coating is made of a polymer material which is a matrix in which an electrically conductive material is disposed.
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34. (Original) The method of claim 33, further comprising:

disposing an electrically insulative layer between said housing structure and said electrically conductive coating.

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35. (Previously Presented) The method of claim 34, further comprising:

impressing a current on said electrically conductive coating from said source of electrical power through the ohmic connection between said source of electrical power and said electrically conductive coating;

10 sensing a voltage at a preselected distance from said housing structure to determine the effectiveness of said causing step.

36. (Original) The method of claim 35, further comprising:

15 intermittently ceasing said causing step as a function of said voltage to regulate said voltage to a predetermined range of magnitudes.

37. (Original) The method of claim 36, wherein:

said housing structure is at least partially submerged in saltwater; and
chlorine gas is formed on an exposed surface of said housing structure.